AEROSPACE POWER IN URBAN WARFARE: BEWARE THE HORNET'S NEST

Peter C. Hunt

INSS Occasional Paper 39

Aerospace Issues and Planning Series

May 2001

USAF Institute for National Security Studies USAF Academy, Colorado



The views expressed in this paper are those of the authors and do not necessarily reflect the official policy or position of the Department of the Air Force, the Department of Defense, or the U.S. Government. This paper is approved for public release by SAF/PA; distribution is unlimited.

Comments pertaining to this paper are invited; please forward to:

Director, USAF Institute for National Security Studies

HQ USAFA/DFES

2354 Fairchild Drive, Suite 5L27 USAF Academy, CO 80840

phone: 719-333-2717 fax: 719-333-2716

email: james.smith@usafa.af.mil

Visit the Institute for National Security Studies home page at http://www.usafa.af.mil/inss

ISBN: 0-9710900-2-5



TABLE OF CONTENTS

Foreword	VI
Executive Summary	ix
Acknowledgements	X
Introduction	1
Why Should We Care?	3
Aerospace Power and the Levels of War	7
The Relationship Between Offense and Defense	15
A Concept for Aerial Isolation	28
Conclusion	35
Notes	39
Sources Consulted	48



FOREWORD

We are pleased to publish this thirtieth-ninth volume in the Occasional Paper series of the US Air Force Institute for National Security Studies (INSS). Aerospace power has emerged as a primary military instrument of choice in pursuing national objectives within the complex international security environment entering the 21st century. Changes in the security landscape, the dynamics of sub-theater conflicts, and coalition imperatives combine to place new requirements on aerospace operational planning and the conduct of aerospace operations themselves. Occasional Papers 38 and 39 address, in turn, both political and operational dimensions of aerospace power application today. They are presented both for informational and educational purposes to offer informed perspectives on important aspects of contemporary aerospace operations, to generate informed discussion and to bound productive debate on aerospace power in both supported and supporting roles. In Occasional Paper 38, Constraints, Restraints, and the Role of Aerospace Power in the 21st Century, Jeffrey Beene presents a comprehensive examination of the use of aerospace power within tightly restrained conflicts and suggests improvements in doctrine, training, and tools to more effectively employ such power within that environment. Then in Occasional Paper 39, Aerospace Power in Urban Warfare: Beware the Hornet's Nest, Peter Hunt examines the employment of aerospace power in the increasingly important urban operational environment. Aerospace technologies and systems offer alternatives and important adjuncts to surface forces in the urban arena, but significant obstacles and critical considerations must be brought into planning for such operations. Each of these aspects of aerospace power demands greater thought and analysis, and these two occasional papers are presented to help focus that attention.

About the Institute

INSS is primarily sponsored by the National Security Policy
Division, Nuclear and Counterproliferation Directorate, Headquarters US
Air Force (HQ USAF/XONP) and the Dean of the Faculty, USAF
Academy. Our other sponsors currently include the Air Staff's
Intelligence, Surveillance, and Reconnaissance Directorate (XOI) and the
Air Force's 39th and 23rd Information Operations Squadrons; the
Secretary of Defense's Office of Net Assessment (OSD/NA); the
Defense Threat Reduction Agency; the Army Environmental Policy
Institute; and the Air Force long-range plans directorate (XPXP). The
mission of the Institute is "to promote national security research for the
Department of Defense within the military academic community, and to
support the Air Force national security education program." Its research
focuses on the areas of greatest interest to our organizational sponsors:
arms control, proliferation, regional studies, Air Force policy,
information operations, environmental security, and space policy.

INSS coordinates and focuses outside thinking in various disciplines and across the military services to develop new ideas for defense policy making. To that end, the Institute develops topics, selects researchers from within the military academic community, and administers sponsored research. It also hosts conferences and workshops and facilitates the dissemination of information to a wide range of private and government organizations. INSS provides valuable, cost-effective research to meet the needs of our sponsors. We appreciate your continued interest in INSS and our research products.

JAMES M. SMITH Director

EXECUTIVE SUMMARY

Interservice debates concerning urban warfare diverge along two paths. One approach emphasizes the role of infantry, whereas the second approach seeks ways to achieve operational and strategic objectives without large numbers of ground forces. This alternative approach relies on aerospace power to provide commanders with better intelligence, which they can use to analyze and target entities valued by the enemy.

Aerospace power should emphasize those tasks that best support the joint force. The urban area provides aerospace power with advantages over surface-based counterparts, yet it introduces variables affecting the offense-defense relationship that should not be overlooked. The compression of time, space and levels of war in an urban environment threatens to reduce aerospace power effectiveness, much as it degrades the fire and maneuver of surface forces.

Little evidence or doctrine exists concerning offensive aerospace power against modern, well-equipped urban defenders. An operational-level strategy that isolates the enemy optimizes aerospace power with minimum risk, but requires accurate intelligence and specialized munitions. The strength of urban aerospace defenses and the time required to achieve objectives should not be underestimated. Enemies defending the terrain on which they live and work tend to devise workarounds to defeat the most militarily capable attackers.

ACKNOWLEDGMENTS

This paper could not have been accomplished without the support and encouragement of my colleagues and family. I would like to thank the leadership of the 23rd Fighter Group "Flying Tigers," Colonel Joe Wood and Lieutenant Colonel Robert Brown, for their encouragement and understanding as I devoted time to this project. The rare opportunity to conduct research while assigned to an operational flying unit enabled me to reach out and build bridges with a dedicated group of active duty, retired and contractor personnel who are addressing the difficult challenges of urban operations. Thanks also to another Flying Tiger, Lieutenant Colonel Henry Fisher, with whom I debated many of the issues in this paper. Finally, I thank my wife, Debbie and my children, Rachel, Kristen, Abby and Ryan, for their love and patience as I completed this paper.